

FACULTY PROFILE



Dr. R. Sangeetharani working as an Assistant professor in the Department of Chemistry at Auxilium College (Autonomous), Vellore. She has 6.5 years of teaching experience. She has obtained her Ph.D. in the year 2018 from Anna University, Chennai. She has presented papers in national and international seminar and conferences. She has published papers in various journals and conferences. Her research interests include Luminescent Phosphors and Radiation measurements.

1. Name: Dr. R. Sangeetharani
2. Designation: Assistant Professor
3. Qualification: M.Sc, M.Phil, Ph.D.
4. Mobile number: 9092630330
5. E-mail id: sangeethar@auxiliumcollege.edu.in
6. Teaching Experience: 6.5 years
7. Area of specialization: Luminescent Phosphors
8. Positions Held in Auxilium

In charge of department Industrial visit (2018 – 2019, 2019 - 2020)

In charge of department CHRYSL articles (2018-2019, 2022 - 2023)

In charge of department Instrument: UV - Spectrophotometer (2020 till today)

Dean of Science (2020 till today)

In charge of Innovative Initiative Phenyl preparation. (From 2021 till today)

Value Added course Co-Ordinator (2022-23 till today)

Innovation Incubation Centre - Member

Rangers – Unit Leader

9. Research Experience and Guidance: NIL
10. Projects Completed / Ongoing: - NIL
11. No. of Papers Published: 6
12. No. of Papers Presented in the National/International/Seminars/Workshops/Conferences: 6
13. No. of Seminars/Workshops/Conferences organized: 2
14. No. of Books Published/Edited/Co-edited: NIL
15. Membership in professional bodies:
16. Other bodies: Food Safety & Drug Administration Department, District Level Advisory Committee Member, Vellore District.
17. Honours & awards received: NIL
18. No. of Online Courses completed (Minimum of 4 Weeks): NIL
19. Any Other: NIL

PUBLICATIONS

1. Sangeetha Rani R, Lakshmanan AR, Sivakumar, V. Venkatasamy R, Annalakshmi O, Jose MT & Marimuthu KN. 'Redox and charge transfer processes and luminescence in $\text{CaSO}_4:\text{Zn,Mn}$ ', Radiation Measurements, May 2015, Vol. 76, pp. 8-16.
2. Sangeetha Rani R, & Lakshmanan AR. 'The role of anion and cation vacancies in the thermoluminescence and photoluminescence processes of $\text{BaSO}_4:\text{Eu}^{2+}$ ', Journal of Luminescence, June 2016, Vol. 174, pp. 63-69.
3. Sangeetha Rani R, Nandha Gopal J, Bhaskar Sanyal Marimuthu KN & Lakshmanan AR, 'Role of flux and co-dopants on the luminescent properties of $\text{BaSO}_4:\text{Eu}^{2+}$ phosphor synthesized by Co-precipitation route' Radiation Effects and Defects in Solids, Jan 2017, Vol. 172, pp. 379-397.
4. Lakshmanan AR, Sivakumar V, Sangeetharani R, Kalpana S. 'Effect of anion interstitials on the thermoluminescent properties of $\text{CaSO}_4:\text{Dy}$ ' Journal of Luminescence, Oct 2013, Vol. 142, pp. 212-219.

5. Sivakumar V, Lakshmanan AR, Sathish Kumar R, Kalpana S, Sangeetha Rani R, MT Jose. 'Preparation and characterization of yttrium-based luminescence phosphors' Indian Journal of Pure and Applied Physics, Mar 2012, Vol. 50(2) pp.123-128.
6. Sivakumar V, Lakshmanan AR, Kalpana S, Sangeetharani R, Kumar RS, Jose MT, 'Low-temperature synthesis of $Zn_2SiO_4:Mn$ green photoluminescence phosphor' Journal of Luminescence, Aug 2012, Vol. 132 (8), pp. 1917-1920.

Papers presented in Seminar / Symposia / Conference

1. **Sangeetha Rani, R**, Lakshmanan, AR & Sivakumar, V 2012, 'Effect of flux and photoluminescence properties of YAG:Ce phosphor', International Conference on Luminescence and its Application (ICLA-2012), organized by Rajiv Gandhi University of Knowledge Technologies and LSI, Hyderabad, India, during 7-10, February.
2. **Sangeetha Rani, R**, Lakshmanan, AR & Sivakumar, V 2014, 'A New Thermoluminescent Phosphor based on $(Ca,Zn)SO_4:Mn$ ', National Conference on Emerging trends in Science and Humanities (NCETSH - 2014), organized by Department of Science and Humanities, Saveetha Engineering College Thandalam, Chennai-602105, India, during 11th, April.
3. **Sangeetha Rani, R** & Lakshmanan, AR 2015, 'Thermoluminescent and photoluminescent characteristics of a new phosphor based on $(Ca,Zn)SO_4:Mn$ ', International Conference on Luminescence and its Application (ICLA-2015), organized by PES University, Bengaluru, India, during 9-12, February.223
4. **Sangeetha Rani, R** & Lakshmanan, AR 2015, 'Red emitting $CaS:Eu^{2+}$ photoluminescent phosphor for white LED applications-A New synthesis route', International Conference on Luminescence and its Application (ICLA-2015), organized by PES University, Bengaluru, India, during 9-12, February.
5. **Sangeetha Rani, R** & Lakshmanan, AR, 2016, 'Synthesis and characterization of $BaSO_4:Eu^{2+}$ a thermoluminescent phosphor by using different techniques', National Conference on Advanced materials (NCAM-2016), organized by Department of Physics, SSN College of Engineering, Kalavakkam, Chennai, India, during 21-22, March.
6. **Sangeetha Rani, R**, 2018, 'Synthesis of $Y_3Al_5O_{12}:Ce^{3+}$ phosphor for white light illumination', National Conference on Recent Advances in Chemical Sciences (RACS – 2018), Department of Chemistry, Arignar Anna Government Arts College, Cheyyar, during 5-6 September.

Seminar / Symposia / Conference / Workshop Attended

1. National Seminar Recent Research in Chemical Sciences, PG & Research Department of Chemistry, Auxilium College, 19.01.2018.
2. Workshop on Green Approach to Chemistry Experiments, Loyola College, Chennai, 09.08.2018-11.08.2018.
3. Two Days Faculty Development Workshop on Outcome-Based Education, Don Bosco College (Co-Ed), Yelagiri Hills, 26.10.2018 & 27.10.2018.
4. Training Programme on “Training of Teachers (ToT) for Student Induction Programme (SIP)”, UGC, South Eastern Regional Office, Hyderabad, 16.05.2019 to 18.05.2019.
5. Enriching & Enhancing the Effectiveness of Teaching using 21st Century Skill Sets, The Haskalah Academy, Auxilium College, 05.06.2019 to 07.06.2019.
6. Two Days State Level Workshop On “Intellectual Property Rights” Tamil Nadu State Council for Science & Technology, Research Cell & IPR Cell, Auxilium College, 02.08.2019 to 03.08.2019.
7. “Training of Teachers for Student Induction Programme” (Deeksharambh – Phase II), Bharathiar University, Coimbatore, 30.10.2019 to 31.10.2019
8. National Seminar on Education, Neuroscience, Technology & Pedagogy: Neuro- Systemic Influence on Learning, Christ (Deemed to be University), 12.11.2019 - 14.11.2019.
9. National Seminar on Advances in Materials Chemistry (AMC’19), PG & Research Department of Chemistry, Auxilium College, 06.12.2019
10. One Day International Seminar on Contemporary Developments in Chemistry (CDC – 2020), PG & Research Department of Chemistry, C.Abdul Hakeem College, Melvisharam, 9.01.2020.
11. One Day Workshop on Awareness Programme on Careers in Chemistry, B.S.Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai, 27.01.2020.
12. National Conference on Teaching, Learning & Evaluation: Changes & Challenges, IQAC, Auxilium College, 30.01.2020 to 31.01.2020.
13. National Seminar on NAAC Assessment and Accreditation Building Institutional Competencies, Christ (Deemed to be University), 05.03.2020 to 07.03.2020.
14. International Faculty Development Programme on “Building Partnership and Resources” Sri Kanyaka Parameswari Arts & Science College for Women, Chennai, 08.05.2020.
15. International Webinar on “Molecular Visualization Series on Learning Chemistry through ODYSSEY & SPARTAN Software”, 09.05.2020.
16. International Webinar on “Design Thinking in Global Education Contemporary Teaching and Learning Techniques” 03.06.2020 to 05.06.2020.
17. Webinar on “Essentials of Nanotechnology and Nanoelectronics” Department of Physics, Saveetha Engineering College, Chennai, 13.06.2020.

18. Two Days International Webinar on “Advanced functional materials for biomedical and energy”
Department of chemistry, Loyola College, Chennai, 24.06.2020 to 25.06.2020.
19. “Silver Jubilee International Webinar” Department of Chemistry & IQAC, Sri Akilandeswari
Women’s College, Wandiwash. 26.06.2020.
20. Webinar on “Use of Lanthanide ions as Photoluminescence (structural probes)” Department of
Physics, Saveetha Engineering College, Chennai, 06.07.2020.
21. International Webinar on “MALDI-ToF Mass Spectrometry – A novel technique to analyse
latent fingerprints.” Department of Chemistry, QUIAD-E-MILLATH Government College for Women
(Autonomous), Chennai. 11.07.2020.

Orientation, Refresher Programmes and FDP Attended

1. 5 Days Faculty Development Programme on “Teaching using ICT tools” 20.05.2020 to 24.05.2020
2. Five Day Online Faculty Development Programme on “Advanced Materials and their Applications”
02.06.2020 to 06.06.2020
3. International Faculty Development Programme (online) of one week, four hours per day on Evolving
Best Teaching and Learning Practices in the Pandemic Era 2020, 15.06.2020 to 21.06.2020
4. **UGC Sponsored Online Induction Program conducted by UGC-HRDC Centre**, University of Kerala,
28.02.2022 to 20.03.2023.
5. **UGC Sponsored Refresher Course in Research Methodology-Interdisciplinary**, UGC-HRDC Centre,
University of Madras, 08.07.2022 to 21.07.2022.

Programs Organized

1. **Eat Right Auxilium (17.05.2022 to 19.05.2022)** The ‘Eat Right Campus initiative led by FSSAI aims to promote safe, healthy, and sustainable food in campuses such as schools, universities, colleges, workplaces, hospitals, tea estates, etc. across the country. The objective is to improve the health of people and the planet and promote the social and economic development of the nation. As a part of Eat Right India, the Eat Right Campus initiative has been taken in our institution. The college inaugurates the Eat Right Campus on 17th May 2022 by our district collector, Vellore. The program's motive is to support and ensure safe, healthy, and sustainable food for the students who spend most of their time on campus.

The following activities were initiated as a part of this event.

1. Resource talk on Food safety & adulteration
2. Foodfest “Orgbite-100”
3. Resource talk “Eat Right to Perform Better” & Debate

2. **National Seminar on “Innovations in Chemistry for Environmental Sustainability”** Organized by PG & Research Department of Chemistry and Nature Science Foundation, Coimbatore, 03.02.2023.